REMARKS

Entry and consideration of this amendment are respectfully requested in light of the above amendments and the following remarks. Claims 1-8 remain pending herein. Claims 1-8 are rejected.

Claim 1 has been amended for stylistic reasons ("at least one" replaced with "one or more") to improve form and to clarify that while one or a plurality of broadcast channels and one or a plurality of data-communication signals are converted and combined in a signal received by the ONU, only the particular broadcast signals selected by the user and the data-communication signals are transmitted by the ONU in a predetermined time slot assigned to the user. Support for the amendment to claim 1 is clearly found at least at page 11, lines 3-7 and 17-21, page 12, lines 11-18, page 14, lines 12-14 and 16-20, as well as Fig. 5. Claim 2 has been amended to recite that the TDM-based data is transmitted during broadcasting without the use of a complex modulation scheme (such as QAM); support is found in the specification at page 14, lines 10-12). Claim 5 was amended for consistency with claim 1.

Applicant has edited the Abstract again to overcome all objections regarding form. Accordingly, Applicant respectfully requests withdrawal of this ground of objection.

Claims 5, 6 and 7 stand objected to because of informalities. However, Applicant respectfully notes that the informalities listed in the current Office Action were addressed in the Amendment filed December 26, 2006. Therefore, Applicant respectfully requests acknowledgment that this ground of objection was overcome in the previous response due to the previously amendment to claim 5 in the previous Amendment.

Claims 1 and 3-5 stand rejected under 35 USC § 102(b) as allegedly being anticipated by Lehman *et al.* (US 4,763,317) ("Lehman"). Applicant respectfully traverses this ground of rejection for the reasons indicated herein below.

Claim 1 recites a system for integrating broadcast and communication technologies, comprising, *inter alia*: an optical-line terminal (OLT) that receives one or more broadcast signals and one or more external data communication signals, converts the received signals and combines them into an optical signal, and transmits the optical signal according to, for example, a wavelength-division multiplexing (WDM) protocol; an optical network unit (ONU) receives and separates the optical signals transmitted by the OLT into the one or more broadcast signals and one or more external data communication signals, and then combines the particular broadcast signal(s) selected by the user and the one or more external data communication signals, which are multiplexed in an optical output signal from the ONU with the selected material being carried on the optical output signal at the predetermined time slot assigned to the user; and a user gateway for distributing to the user the optical output signal received from the ONU.

In contrast, Lehman discloses a digital communication network architecture for providing universal information services comprising a local central node 110 and a remote node 103, which are alleged in the Office Action as being read on by the presently claimed OLT and ONU. At least one reason why Applicants respectfully disagree with the rejection, and patentably distinguish from Lehman, is that the remote node 103 carries "all channels 205 and 206" between a remote node 103 and a subscriber 102 via fiber 105 (column 13, lines 52-59 and Fig. 3). Also, Lehman discloses that the remote node has a controller 507 and that **"controller 507 operates under the direction of the central**

node 110 and receives control commands therefrom over control bus extension 106" (column 19, lines 51-54 and Fig. 9). In other words, the controller 507 of remote node 103 (shown in Fig. 9) **receives commands from the central node 110** (and not from the user) about downloading, which does not disclose or suggest the recitation in present claim 1 of "transmitting only the broadcast signal(s) **selected by a user** from said one or more broadcast signals and the communication signals, which are multiplexed in an optical output signal from the ONU according to a predetermined time slot assigned to the user" (emphasis added in boldface).

Moreover, while it is asserted in the Office Action at page 3, lines 8-9 and page 4, lines 6-8, that Lehman discloses at column 19, lines 35-40 and 55-58, that the remote node transmits a broadcast channel selected by a user, Applicants respectfully disagree both because of the above the description of controller 507 at column 19, lines 51-54, and the portion of column 19 that states the "controller 507 is coupled to the wideband fabric 505 and controls switch closures therein to provide video channel change functions for subscribers 102, coordination with node 110 for provisions of point-to-point services, and processing of maintenance commands received from the node 110" (column 19, lines 46-51). As shown in Fig. 9 of Lehman, the controller 507 receives commands directly from node 110 via bus extension 106.

For at least the above reasons, Applicant respectfully submits that claim 1 is not anticipated by Lehman, nor would have a person of ordinary skill in the art found present claim 1 obvious at the time of the invention in view of Lehman and the skill in the art.

In addition, Applicant respectfully submits that claims 3-5 are also not anticipated by Lehman, at least because Lehman fails to disclose all the elements recited by base

claim 1, and because of an independent basis for patentability for each claim. For example, claim 5 recites a zapping protocol processor that is not disclosed or suggested by Lehman. In contrast, Lehman discloses that the *central node* 110 controls the remote node 103 via bus extension 106, and the user does not control operation of the remote node such that only the broadcast channels selected by the user are output to the user. Accordingly, the individual consideration of the patentability of each claim on its own merits is respectfully requested.

Finally, with regard to the rejections of claims 2 and 6-8 under 35 U.S.C. § 103(a), the several references in combination with Lehman still fail to disclose or suggest all the elements recited by claim 1. In addition, claims 2 and 6-8 have a separate basis for patentability. For example, claim 2 recites in part that the TDM-based data can be transmitted during broadcasting without the use of a complex modulation scheme. Heretofore, the use of a complex modulation scheme, such as quadrature-amplitude modulation, was required in conventional digital broadcast equipment or the bandwidth would be insufficient for use. Digital broadcasts transmitted during broadcasting, without using QAM, while retaining Quality of Service (QoS) requirements, is not disclosed or suggested in the combination of references.

Reconsideration and withdrawal of this ground of rejection are respectfully requested.

For all the foregoing reasons, it is respectfully submitted that all grounds of objection and rejection have been overcome, and the present claims are patentable in view of the cited references. A Notice of Allowance is respectfully requested.

Respectfully submitted,

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